

What is Claimed:

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1. An intervertebral disc prosthesis comprising:
a body adapted to fit an intervertebral space between adjacent vertebrae,
wherein the body comprises a resilient biocompatible material.
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2. The intervertebral disc prosthesis of Claim 1, wherein the body of the
intervertebral disc prosthesis is selected from the group consisting of a
monolayer sheet, a laminate comprising a plurality of layers, a block, a
disc, an annulus and a ribbon, and wherein the laminate further comprises
10 at least one fastener selected from the group consisting of a suture, a
staple, a clip, an adhesive, and cell growth invasion of the laminate.
3. The intervertebral disc prosthesis of Claim 2, wherein the laminate is a
folded sheet.
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4. The intervertebral disc prosthesis of Claim 1, wherein the resilient
biocompatible material is selected from a dissected human or animal
tissue, an inorganic polymer, an organic polymer, or a combination
thereof, and wherein the resilient biocompatible material is sterilized
20 before implantation in a patient.

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5. The intervertebral disc prosthesis of Claim 1, wherein the resilient biocompatible material has at least one defined line for removing a portion of the resilient biocompatible material.
- 5 6. The intervertebral disc prosthesis of Claim 5, wherein the at least one predetermined line is selected from a linear indentation, a plurality of indentations or a plurality of perforations.
7. The intervertebral disc prosthesis of Claim 5, wherein the portion of the
10 resilient biocompatible material removed is a ribbon.
8. The intervertebral disc prosthesis of Claim 4, wherein the dissected animal tissue is selected from porcine and bovine tissue.
- 15 9. The intervertebral disc prosthesis of Claim 4, wherein the dissected human or animal tissue is dissected from a pericardium.
10. The intervertebral disc prosthesis of Claim 1, wherein the resilient biocompatible material is fixed by a protein cross-linking agent, and
20 wherein the biocompatible material is detoxified.
11. The intervertebral disc prosthesis of Claim 1, wherein the protein cross-linking agent is glutaraldehyde.

12. The intervertebral disc prosthesis of Claim 1, wherein the resilient
biocompatible material is treated with an anti-calcification process.
- 5 13. The intervertebral disc prosthesis of Claim 1, wherein the resilient
biocompatible material is treated with a blood anti-coagulant.
- 10 14. The intervertebral disc prosthesis of Claim 1, wherein the body has an
anterior face and a one posterior face.
- 15 15. The intervertebral disc prosthesis of Claim 14, wherein the thickness of
the anterior face is greater than the thickness of the posterior face.
16. The intervertebral disc prosthesis of Claim 14, wherein the thickness of
15 the anterior face is less than the thickness of the posterior face.
17. The intervertebral disc prosthesis of Claim 1, further comprising an
intervertebral spacer.
- 20 18. The intervertebral disc prosthesis of Claim 17, wherein the intervertebral
spacer is comprised of a biocompatible non-resilient material selected
from the group consisting of a metal, a plastic, an inorganic polymer, an
organic polymer or a combination thereof.

19. The intervertebral disc prosthesis of Claim 17, wherein the intervertebral spacer is compressible.

5 20. A method of maintaining an intervertebral space between adjacent vertebrae, comprising the steps of:

(a) excising at least a portion of an intervertebral disc, thereby creating a receiving slot; and

10 (b) inserting into the receiving slot at least one intervertebral disc prosthesis, the intervertebral disc prosthesis comprising a body adapted to fit an intervertebral space between adjacent vertebrae, wherein the body comprises a resilient biocompatible material.

15 21. The method of Claim 20, wherein the resilient biocompatible material is a dissected animal pericardium, and wherein the dissected animal pericardium is detoxified, fixed and treated with an anti-calcification process before implantation of the resilient biocompatible material into a patient.

20 22. The method of Claim 20, wherein the intervertebral disc prosthesis is a ribbon.

23. The method of Claim 20, further comprising the step of:
removing a minimal portion of the bony process of a vertebrae,
thereby creating access to the damaged intervertebral disc.

5 24. The method of Claim 20, further comprising the step of:
implanting an intervertebral spacer into an intervertebral space.

10 25. The method of Claim 20, further comprising the step of:
delivering to the intervertebral space a substance, the substance,
when in the intervertebral space, having a consistency ranging
from a semi-solid state to a solid state.

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